

L Number	Hits	Search Text	DB	Time stamp
38	1514	borate adj salt	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/22 13:31
39	427739	amine	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/22 13:32
40	2	(capture or capturing) near2 (protonic adj acid)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/22 13:33
41	37934	(polymer or resin or copolymer) near10 (carboxyl)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/22 13:34
42	383260	(polymer or resin or copolymer) near10 (carboxyl or acid)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/22 13:34
43	134803	(polymer or resin or copolymer) near10 (unsaturation or unsaturated or double adj bond)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/22 13:36
45	110	(borate adj salt) and amine and ((polymer or resin or copolymer) near10 (carboxyl or acid)) and ((polymer or resin or copolymer) near10 (unsaturation or unsaturated or double adj bond))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/22 13:36
44	19	(borate adj salt) and amine and ((polymer or resin or copolymer) near10 (carboxyl)) and ((polymer or resin or copolymer) near10 (unsaturation or unsaturated or double adj bond))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/22 13:36

L Number	Hits	Search Text	DB	Time stamp
38	1514	borate adj salt	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/22 13:31
39	427739	amine	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/22 13:32
40	2	(capture or capturing) near2 (protonic adj acid)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/22 14:01
41	37934	(polymer or resin or copolymer) near10 (carboxyl)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/22 13:34
42	383260	(polymer or resin or copolymer) near10 (carboxyl or acid)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/22 13:34
43	134803	(polymer or resin or copolymer) near10 (unsaturation or unsaturated or double adj bond)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/22 13:36
45	110	(borate adj salt) and amine and ((polymer or resin or copolymer) near10 (carboxyl or acid)) and ((polymer or resin or copolymer) near10 (unsaturation or unsaturated or double adj bond))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/22 13:36
44	19	(borate adj salt) and amine and ((polymer or resin or copolymer) near10 (carboxyl)) and ((polymer or resin or copolymer) near10 (unsaturation or unsaturated or double adj bond))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/22 13:36
46	106	(capture or capturing) near3 (protonic or proton or hydrogen adj atom)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/22 14:02
47	1	(borate adj salt) and ((capture or capturing) near3 (protonic or proton or hydrogen adj atom))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/22 14:02

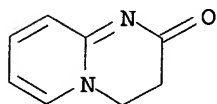
L Number	Hits	Search Text	DB	Time stamp
1	1514	borate adj salt	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/22 12:34
2	23961	(polymer or resin) near5 carboxyl	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/22 12:32
3	98893	(polymer or resin) near10 (unsaturated or unsaturation)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/22 12:24
4	411588	phenyl	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/22 12:33
5	4	(borate adj salt) and ((polymer or resin) near5 carboxyl) and ((polymer or resin) near10 (unsaturated or unsaturation)) and phenyl	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/22 12:22
6	107199	(polymer or resin) near10 (unsaturated or unsaturation or double adj bond)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/22 12:32
7	45472	(polymer or resin) near7 (unsaturated or unsaturation or double adj bond)	USPAT; US-PGPUB	2003/07/22 12:32
8	13623	(polymer or resin) near5 carboxyl	USPAT; US-PGPUB	2003/07/22 12:32
9	218338	phenyl	USPAT; US-PGPUB	2003/07/22 12:33
10	4711	430/270.1.ccls. or 430/281.1.ccls.	USPAT; US-PGPUB	2003/07/22 12:33
11	238	((polymer or resin) near7 (unsaturated or unsaturation or double adj bond)) and ((polymer or resin) near5 carboxyl) and phenyl and (430/270.1.ccls. or 430/281.1.ccls.)	USPAT; US-PGPUB	2003/07/22 12:33
12	1218	borate adj salt	USPAT; US-PGPUB	2003/07/22 12:34
13	2	((polymer or resin) near7 (unsaturated or unsaturation or double adj bond)) and ((polymer or resin) near5 carboxyl) and phenyl and (430/270.1.ccls. or 430/281.1.ccls.)) and (borate adj salt)	USPAT; US-PGPUB	2003/07/22 12:34
14	44373	borate	USPAT; US-PGPUB	2003/07/22 12:34
15	48	((polymer or resin) near7 (unsaturated or unsaturation or double adj bond)) and ((polymer or resin) near5 carboxyl) and phenyl and (430/270.1.ccls. or 430/281.1.ccls.)) and borate	USPAT; US-PGPUB	2003/07/22 12:51
16	428	borate and ((polymer or resin) near7 (unsaturated or unsaturation or double adj bond)) and ((polymer or resin) near5 carboxyl)	USPAT; US-PGPUB	2003/07/22 12:51
18	258749	amine	USPAT; US-PGPUB	2003/07/22 12:52
19	350	(borate and ((polymer or resin) near7 (unsaturated or unsaturation or double adj bond)) and ((polymer or resin) near5 carboxyl)) and amine	USPAT; US-PGPUB	2003/07/22 12:52
17	63	(430/270.1.ccls. or 430/281.1.ccls.) and (borate and ((polymer or resin) near7 (unsaturated or unsaturation or double adj bond)) and ((polymer or resin) near5 carboxyl))	USPAT; US-PGPUB	2003/07/22 12:56
20	1220	borate same developer	USPAT; US-PGPUB	2003/07/22 12:57

22	317	((borate and ((polymer or resin) near7 (unsaturated or unsaturation or double adj bond)) and ((polymer or resin) near5 carboxyl)) and amine) not (borate same developer)	USPAT; US-PGPUB	2003/07/22 12:57
21	44	((430/270.1.ccls. or 430/281.1.ccls.) and (borate and ((polymer or resin) near7 (unsaturated or unsaturation or double adj bond)) and ((polymer or resin) near5 carboxyl))) not (borate same developer)	USPAT; US-PGPUB	2003/07/22 12:57
23	1980	borate same (developer or developing)	USPAT; US-PGPUB	2003/07/22 12:58
25	302	((borate and ((polymer or resin) near7 (unsaturated or unsaturation or double adj bond)) and ((polymer or resin) near5 carboxyl)) and amine) not (borate same (developer or developing))	USPAT; US-PGPUB	2003/07/22 12:58
24	35	((430/270.1.ccls. or 430/281.1.ccls.) and (borate and ((polymer or resin) near7 (unsaturated or unsaturation or double adj bond)) and ((polymer or resin) near5 carboxyl))) not (borate same (developer or developing))	USPAT; US-PGPUB	2003/07/22 13:07
26	1	6569603.pn.	USPAT; US-PGPUB	2003/07/22 13:08
27	1	6114092.pn.	USPAT; US-PGPUB	2003/07/22 13:10
28	1	5496685.pn.	USPAT; US-PGPUB	2003/07/22 13:10
29	1	5413863.pn.	USPAT; US-PGPUB	2003/07/22 13:11
30	1	5206113.pn.	USPAT; US-PGPUB	2003/07/22 13:12
31	1	5153095.pn.	USPAT; US-PGPUB	2003/07/22 13:13
32	1	4701399.pn.	USPAT; US-PGPUB	2003/07/22 13:14
33	1	4603103.pn.	USPAT; US-PGPUB	2003/07/22 13:15
34	1524	(capture or capturing) near2 acid	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/22 13:16
35	2	(capture or capturing) near2 (protonic adj acid)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/22 13:18
36	1	jp-53002403-S.did.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/22 13:22
37	2	5308888.pn.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/07/22 13:23

L3 ANSWER 11 OF 25 CAPLUS COPYRIGHT 2003 ACS on STN
 AN 1978:190411 CAPLUS
 DN 88:190411
 TI Capturing protonic acids
 IN Mukoyama, Mitsuaki; Kobayashi, Susumu
 PA Tokyo Kasei Kogyo K. K., Japan
 SO Jpn. Kokai Tokkyo Koho, 2 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 53002403	A2	19780111	JP 1976-76512	19760630
PRAI	JP 1976-76512		19760630		

AB In the prepn. of esters, acid amides, lactones, ethers, or amines from carboxylic acids, alcs., amines, or alkyl halides by condensation with release of a protonic acid, the protonic acid was captured by neutral or slightly basic compds. I (R,R1-R4 = H, alkyl, alkenyl, cyclohexyl, aryl, aralkyl; R1R2, R3R4 may form a ring) to increase the yield. Thus, 1 mmol PhCH2CO2H and 1 mmol PhCH2OH in CH2Cl2 was treated with a soln. of 1.2 mol 1-methyl-2-chloropyridinium iodide and 2.4 mmol I (R-R4 = H) (II) in CH2Cl2 3 h at room temp. and the ppts. (II.HCl and II.HI) filtered to give 96% PhCH2CO2CH2Ph. N-butylphenylacetamide was similarly prepd.
 IT 5439-14-5
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (catalysts for condensation reactions to remove protonic acids)
 RN 5439-14-5 CAPLUS
 CN 2H-Pyrido[1,2-a]pyrimidin-2-one, 3,4-dihydro- (6CI, 7CI, 9CI) (CA INDEX NAME)



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09/771568

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6569403

L8 ANSWER 1 OF 7 CAPLUS COPYRIGHT 2003 ACS on STN
 AN 2001:643385 CAPLUS
 DN 135:218728
 TI Light-sensitive composition and method for forming relief image using said composition
 IN Furukawa, Akira
 PA Japan
 SO U.S. Pat. Appl. Publ., 30 pp.
 CODEN: USXXCO
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2001018164	A1	20010830	US 2001-771568	20010130
	US 6569603	B2	20030527		
	JP 2001290271	A2	20011019	JP 2000-223304	20000725
	DE 10103964	A1	20011018	DE 2001-10103964	20010130
PRAI	JP 2000-21475	A	20000131		
	JP 2000-223304	A	20000725		

AB The invention relates to a light-sensitive compn. for forming a relief image by using a scanning exposure device such as a laser, and to a compn. suitable for forming a lithog. printing plate, a resist for forming a printed circuit, a color filter or a phosphor pattern. The light-sensitive compn. comprises (a) a polymer having a Ph group substituted by a vinyl group at a side chain, (b) a photopolymn. initiator and (c) a sensitizer which sensitizes the photo-polymn. initiator, or a light-sensitive compn. which comprises (A') a polymer, the above-mentioned (b) and (c), and (d) a monomer having ≥ 2 Ph groups each of which is substituted by a vinyl group in the mol. of the monomer; and a method of forming a relief image which comprises coating the light-sensitive compn. as mentioned above on a support, exposing the compn. by exposure or scanning exposure and developing the same to form a relief image on the support.

IT 357384-13-5

RL: DEV (Device component use); NUU (Other use, unclassified); POF (Polymer in formulation); USES (Uses)
 (lithog. printing plate having light-sensitive coating compn. contg. polymer for forming relief image)

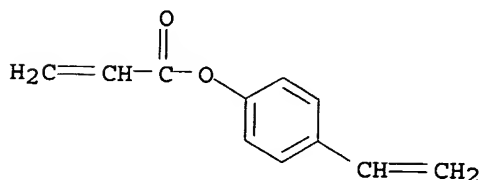
RN 357384-13-5 CAPLUS

CN 2-Propenoic acid, polymer with 4-ethenylphenyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 111791-30-1

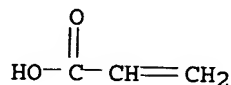
CMF C11 H10 O2



CM 2

CRN 79-10-7

CMF C3 H4 O2



L8 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2003 ACS on STN
 AN 1994:702255 CAPLUS
 DN 121:302255
 TI Fluorine-containing curable resin composition and use for printed circuit board
 IN Nishimura, Shin; Nagai, Akira; Takahashi, Akio; Mukoo, Akio; Narita, Tadashi; Hagiwara, Tokio; Hamana, Hiroshi; Katagiri, Junichi
 PA Hitachi, Ltd., Japan
 SO U.S., 15 pp. Cont.-in-part of U.S. Ser. No. 689,935.
 CODEN: USXXAM
 DT Patent
 LA English
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5308888	A	19940503	US 1993-20399	19930222
PRAI	JP 1989-242034	A	19890920		
	US 1991-689935	A2	19910520		

AB The title resin having excellent heat resistance and flame retardance after curing and showing a low dielec. const. is prepd. from a polymer contg. F or a F-contg. group [C(R1):C(R2)R3xR4y]m, wherein R1,R2 = H, F, Me and CF3; R3, R4 = CH2 and CF2; x,y = 0-4, and m = 30-1000, and a photopolymer. initiator; the compn. is a solid at ambient temp., melts 100-150.degree., has a melt velocity of .ltoreq.106 P, and is photocurable. Thus, poly(hexafluoro-1,3-butadiene) 100, benzophenone 10, Ph3N 10 parts dissolved in hexafluorobenzene gave a varnish for prepg. prepreps for laminate plates.

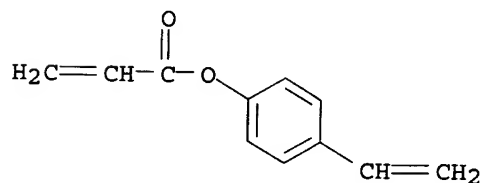
IT 159105-52-9
 RL: USES (Uses)
 (prepreg laminate for printed circuit board)

RN 159105-52-9 CAPLUS

CN 2-Propenoic acid, 4-ethenylphenyl ester, polymer with 1,1,2,3,4,4-hexafluoro-1,3-butadiene (9CI) (CA INDEX NAME)

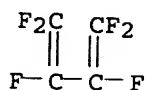
CM 1

CRN 111791-30-1
 CMF C11 H10 O2



CM 2

CRN 685-63-2
 CMF C4 F6



L8 ANSWER 4 OF 7 CAPLUS COPYRIGHT 2003 ACS on STN

AN 1990:516519 CAPLUS

DN 113:116519

TI Thermosetting resin compositions containing dicyanates or diisocyanates and unsaturated halogenated styrene derivative polymers, printed circuit board using the resin composition, and process for producing printed circuit board

IN Suzuki, Masao; Katagiri, Junichi; Nagai, Akira; Suzuki, Masahiro; Takahashi, Akio

PA Hitachi, Ltd., Japan; Hitachi Chemical Co., Ltd.

SO Eur. Pat. Appl., 22 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 364785	A1	19900425	EP 1989-118041	19890929
	EP 364785	B1	19950301		
	R: CH, DE, FR, GB, IT, LI, NL, SE				
	US 5045381	A	19910903	US 1989-413070	19890927
	JP 02167329	A2	19900627	JP 1989-252748	19890928
	JP 08026116	B4	19960313		
	CA 1328528	A1	19940412	CA 1989-614073	19890928
PRAI	JP 1988-246978		19880930		

AB Thermosetting compns. that give fiber-reinforced laminates with good fire resistance, low moisture absorption, and high mech. strength, useful for printed circuit boards, contain A) a dicyanate or diisocyanate having an arom. and (or) allycyclic group, B) a polymer (d.p. 5-100) of ring-halogenated vinylphenyl C2-4-alkenyl ethers or of ring-halogenated vinylphenyl esters of C2-4 unsatd. acids, and optionally, C) compds. having .gtoreq.1 N-substituted unsatd. imide group. Thus, a 50% DMF soln. contg. a 1:1 mixt. of XU-71787 (a dicyanate) and a poly(p-vinyldibromophenyl methacrylate) (av. mol. wt. 6600, d.p. 20), 0.5 parts (based on resin) 2,5-bis(tert-butylperoxy)-3-hexyne radical polymn. initiator and 0.5 parts (based on resin) Co naphthenate trimerization catalyst for the dicyanate was impregnated in a glass fabric and dried 10 min at 150.degree. to give a prepreg and pressing 20 of these prepregs at 30 kg/cm2 for 40 min at 130.degree., 60 min at 170.degree., and 60 min at 200.degree. gave a board with dielec. const. 3.2 (1 MHz), thermal expansion coeff. 7 .times. 10-5/.degree., UL-94 flame resistance value V-0, and Cu foil peel strength 1.2 kg/cm2. Sep., the above-described DMF soln. was applied to a PET sheet, dried 10 min at 150.degree., and press-molded at 30 kg/cm2 for 40 mins at 130.degree., 60 mins at 170.degree., and 60 mins at 200.degree. to give a plate with dielec. const. 3.1 (1 MHz) bending strength 13.2 and 8.3 kg/mm2 at room temp. and 180.degree., resp., thermal decompn. initiation temp. 340.degree., and moisture absorption 1% (JIS-C-6481, 65.degree., relative humidity 95%).

IT 129114-37-0P 129114-41-6P 129114-44-9P

RL: PREP (Preparation)

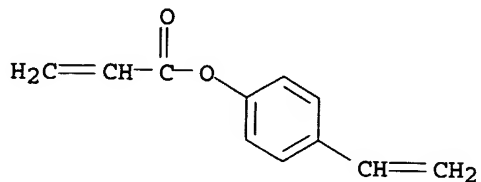
(manuf. of, as glass fabric-reinforced fire- and moisture-resistant laminates for printed circuit boards)

RN 129114-37-0 CAPLUS

CN 2-Propenoic acid, bromo-4-ethenylphenyl ester, polymer with (1-methylethylidene)di-4,1-phenylene dicyanate (9CI) (CA INDEX NAME)

CM 1

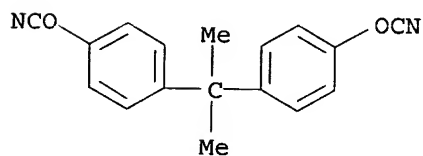
CRN 129114-36-9
CMF C11 H9 Br O2
CCI IDS



D1- Br

CM 2

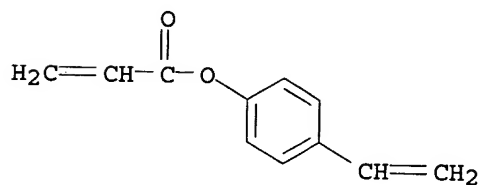
CRN 1156-51-0
CMF C17 H14 N2 O2



RN 129114-41-6 CAPLUS
CN 2-Propenoic acid, dibromo-4-ethenylphenyl ester, polymer with XU 71787
(9CI) (CA INDEX NAME)

CM 1

CRN 129114-40-5
CMF C11 H8 Br2 O2
CCI IDS



2 (D1- Br)

CM 2

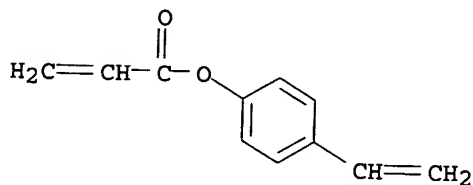
CRN 120026-65-5
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 129114-44-9 CAPLUS

CN 2-Propenoic acid, dibromo-4-ethenylphenyl ester, polymer with
1,1'-(1-methylethylidene)bis[4-isocyanatobenzene] (9CI) (CA INDEX NAME)

CM 1

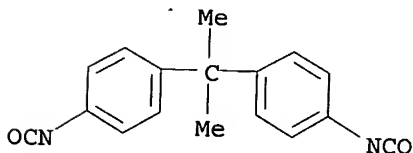
CRN 129114-40-5
CMF C11 H8 Br2 O2
CCI IDS



2 (D1-Br)

CM 2

CRN 2470-48-6
CMF C17 H14 N2 O2



L8 ANSWER 6 OF 7 CAPLUS COPYRIGHT 2003 ACS on STN
AN 1985:479504 CAPLUS
DN 103:79504
TI Resist adhesion improving agents
PA Nippon Zeon Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 60070437	A2	19850422	JP 1983-178817	19830927
PRAI	JP 1983-178817		19830927		

AB Title agents for the adhesion of resists with substrates have, as the effective component, a polymer contg. I (R,R1 = H, substituent; R2 = OH, SH; m,n = 1-5). The adhesion improving agents give excellent adhesion of resists with substrates. Thus, a Si wafer was coated with polybutadiene contg. hydroxybis(4-dimethylaminophenyl)methyl groups at the end positions, heat-treated, and then coated with a poly(vinylcinnamic acid)-type photoresist to give a photosensitive material. The material formed resist patterns by using a test pattern and was etched with a HF-NH4F mixt. to show a side etch length of 0.7 vs. 2.5 .mu. for a control having no polybutadiene subbing layer.

IT 69818-12-8
RL: USES (Uses)

(photoresist from, adhesive inner layer for, for coating on silicon wafer)

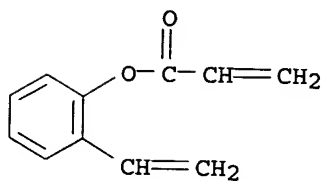
RN 69818-12-8 CAPLUS

CN 2-Propenoic acid, 2-ethenylphenyl ester, homopolymer (9CI) (CA INDEX NAME)

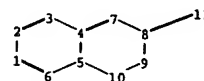
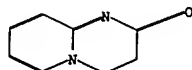
CM 1

CRN 69804-62-2

CMF C11 H10 O2



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chain nodes :

11

ring nodes :

1 2 3 4 5 6 7 8 9 10

chain bonds :

8-11

ring bonds :

1-2 1-6 2-3 3-4 4-5 4-7 5-6 5-10 7-8 8-9 9-10

exact/norm bonds :

1-2 1-6 2-3 3-4 4-5 4-7 5-6 5-10 7-8 8-9 8-11 9-10

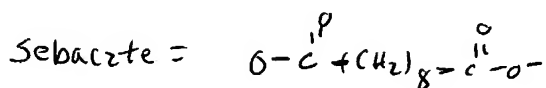
Match level :

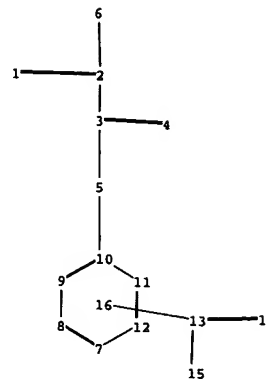
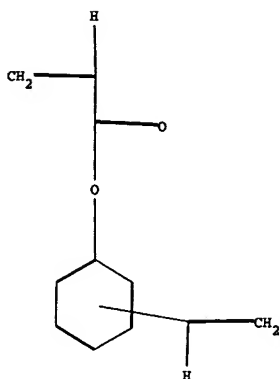
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom

Col. 24, Line 43-

Col 25, line 23- 52

Kayarael TCR1025- Acid modified tris(phenol
methane) Epoxy Acrylate





chain nodes :

1 2 3 4 5 6 13 14 15

ring nodes :

7 8 9 10 11 12

chain bonds :

1-2 2-3 2-6 3-4 3-5 5-10 13-14 13-15

ring bonds :

7-8 7-12 8-9 9-10 10-11 11-12

exact/norm bonds :

3-4 3-5 5-10

exact bonds :

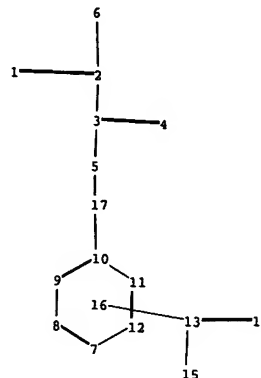
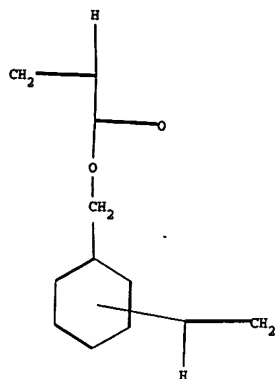
1-2 2-3 2-6 13-14 13-15

normalized bonds :

7-8 7-12 8-9 9-10 10-11 11-12

Match level :

1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:Atom 8:Atom 9:Atom 10:Atom
11:Atom 12:Atom 13:CLASS 14:CLASS 15:CLASS 16:CLASS



chain nodes :

1 2 3 4 5 6 13 14 15 17

ring nodes :

7 8 9 10 11 12

chain bonds :

1-2 2-3 2-6 3-4 3-5 5-17 10-17 13-14 13-15

ring bonds :

7-8 7-12 8-9 9-10 10-11 11-12

exact/norm bonds :

3-4 3-5

exact bonds :

1-2 2-3 2-6 5-17 10-17 13-14 13-15

normalized bonds :

7-8 7-12 8-9 9-10 10-11 11-12

Match level :

1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:Atom 8:Atom 9:Atom 10:Atom
11:Atom 12:Atom 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS